

• WANT to do this work this fall.

5.1.2  
6/04/02

TO DO ? or to dispose Dewatering Pit  
of rain on gyp stack?

- The remedial objective is to prevent incidental worker exposure to the solids in the Dewatering Pit by removing residual solids from the pit area.
- The performance standard will be removal of residual Dewatering Pit solids as verified through confirmatory soil sampling.

### Characteristics

The Dewatering Pit was constructed and used briefly by Simplot during the period of start up for the ore slurry pipeline around 1991.

The Dewatering Pit consists of three bermed areas; with a total surface area of approximately 40,000 square feet. The volume of the residual solids to be removed is estimated at approximately 6,800 cubic yards. The berms are reportedly constructed of native soil and gravel that was excavated from the interior of the pits during construction and are typically in the range of 8 to 12 feet high.

The solids within these pits consists primarily of phosphate ore residuals and solids precipitated by pH adjustment of irrigation waters, which can be visually recognized by their gray color in contrast to the light brown-colored native soil.

During the RI, a single soil boring was drilled within the eastern pit. The material encountered in the upper 2.5 feet of this boring consisted of residual solids. The material encountered in the remainder of the boring consisted of sand (2.5 to 4 feet depth), and gravel (below 4 feet).

1 sample for RI

Constituent	Background Levels (mg/kg) <sup>1</sup>	Sampling Depth (feet)				
		Surface	2.5	10	20	26
		Concentration (mg/kg)				
Arsenic	7.7	15	<3.3	<2.8	<2.3	<0.55
Beryllium	1.0	5.2	0.23	0.19	0.13	0.12
Cadmium	1.9	131	0.54	0.49	0.5	0.49
Chromium	27.5	2,710	16.3	30.9	31.1	8.9
Fluoride	600	30,000	710	550	320	140
Phosphorus	672	51,300	544	501	301	407
Zinc	52.8	3,610	35.8	37.2	24.8	25.3

Note:

1. Background constituent levels for site soils derived by EPA.

Human health risks for site workers associated with incidental ingestion of soils were estimated in EPA's risk assessment. Constituents of concern at the site are present at background levels that often represent risks that are within or above the acceptable risk range of  $10^{-6}$  to  $10^{-4}$ . Therefore, the risk assessment calculated incremental risks; risks associated with elevated constituent concentrations minus risks associated with background concentrations.

Estimated Human Health Risks for Simplot Maintenance Workers: for arsenic an incremental cancer risk of  $1.3 \times 10^{-6}$  and for beryllium an incremental cancer risk of  $1.9 \times 10^{-6}$ .

It should be noted that the risk assessment approach assumed that an individual worker performs activities in the Dewatering Pit area for 75 days per year for a period of 25 years. This area is not within the main plant area and in fact no work has been performed in or around the Dewatering Pit. The risk estimates are therefore highly conservative.

## Remedial Design

Excavation of the residual solids will be performed using standard earthmoving equipment. Material will be excavated and loaded directly into haul trucks for transport to the gypsum stack. As the gypsum stack grows due to ongoing Don Plant operations, the Dewatering Pit solids will be covered by gypsum.

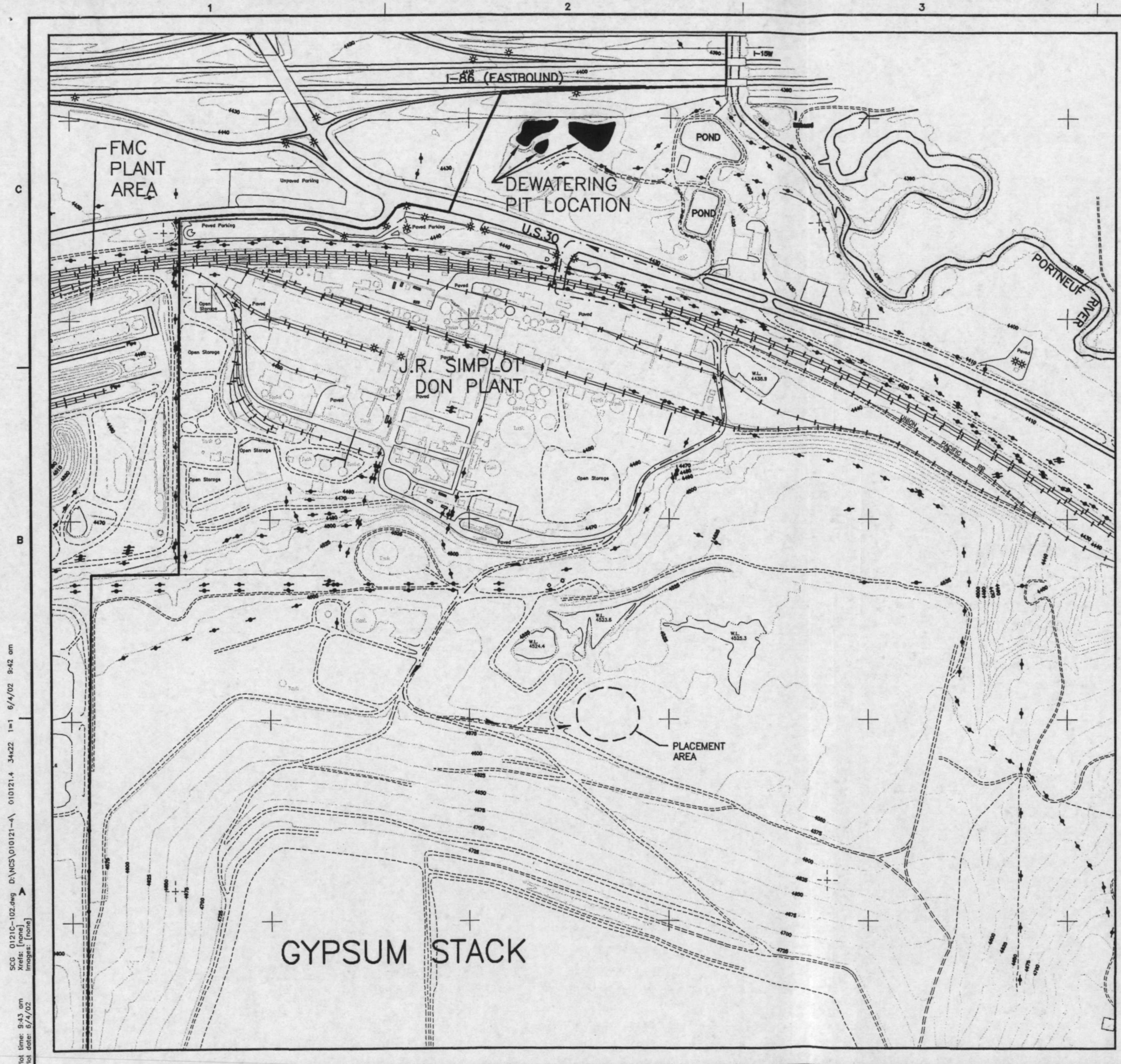
Excavation of the residual solids will be guided by visual observation. Excavation will proceed both horizontally and laterally until there is a visible change in the material type indicating the interface with native soil. After reaching these excavation limits, confirmation sampling will be performed. Solids removal will be confirmed by a zinc concentration of 360 mg/Kg or less.

*10% of source material is controlled -*

Once excavation activities have been completed, the gravel and soil berms surrounding the pits will be used as backfill and the area will be regraded to establish a final grade consistent with the surrounding terrain, to promote positive drainage.

It is estimated that the remedial action will take approximately 2 to 3 weeks to complete.

Simplot is considering construction of a new lined pond in this area in the near future.



LEGEND:

- DEWATERING PIT
- HAUL ROUTE TO GYPSUM STACK PLACEMENT AREA
- PLACEMENT AREA

NOTES:

1. CONTRACTOR MUST COMPLY WITH ALL SIMPLOT TRAFFIC AND SAFETY RULES AND REGULATIONS WHEN TRAVELING THROUGH THE DON PLANT.
2. ALL HAUL TRAFFIC MUST BE CONFINED TO DESIGNATED HAUL ROUTES.
3. EXACT PLACEMENT AREA OR DUMPING SITE WILL BE DESIGNATED BY SIMPLOT OPERATIONS PERSONNEL.
4. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND/OR APPROPRIATE SIGNAGE, AS NECESSARY, AT ENTRANCE TO HIGHWAY 30.



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REFERENCE

- BECHTEL ENVIRONMENTAL, INC., DATE OF PHOTOGRAPHY: 21JUN92 DATE OF MAPPING: AUGUST 92 MAPPING AND PHOTOGRAPHY BY WALKER AND ASSOCIATES, INC. SEATTLE, WASHINGTON. SEATTLE, WASHINGTON

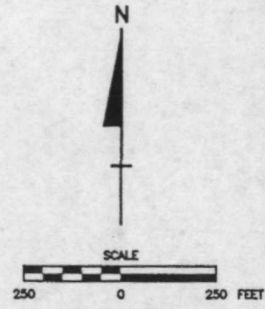
NO.	REVISIONS	BY	DATE
0	ISSUE FOR REVIEW	DLL	05/02

DESIGNED BY: DLL  
DRAWN BY: SCG  
CHECKED BY: ACK  
APPROVED BY: DLL  
CTB: MFG-STD  
VIEW NAME: PLAN  
ORIGINATION DATE: 04/29/02  
PLOT SCALE: 1:1 OR 1:2  
DATE: MAY 2001

**EASTERN MICHAUD FLATS  
POCATELLO, IDAHO  
SIMPLOT PLANT AREA  
DEWATERING PIT REMEDIAL  
ACTION**

**DEWATERING PIT  
SITE PLAN AND  
HAUL ROUTE**

DRAWING NO. **0121C-102** REV. NO. **0**  
SHEET **2** OF **4**



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Plot date: 6/4/02  
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